



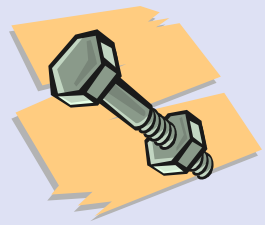
# **Pro Forma Exercise**

## **Nuts & Bolts of Redeveloping Brownfields** (and Other Contaminated Properties) for Local Governments

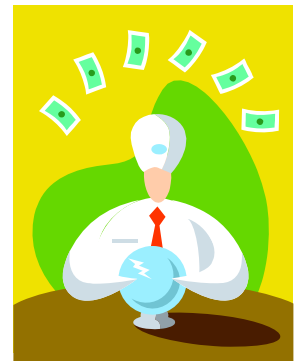
**Day 4: Financial Resources, Session #27**

**Discovery Center, Kansas City, Missouri**  
**August 30, 2007**

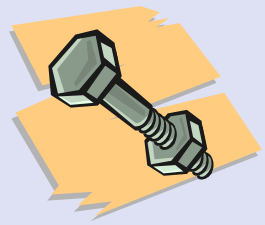
# Pro Forma



- From Latin meaning "according to form."
- A pro forma statement is a financial statement projecting anticipated income, expenses and cash flow for some specified future period.
- The pro forma is about balancing projected economics of the project to a favorable build
- You will attempt to balance the brownfield build against the greenfield project

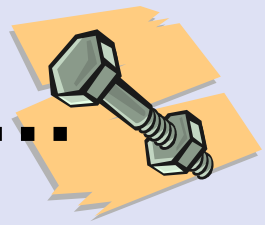


# A typical Brownfield ...



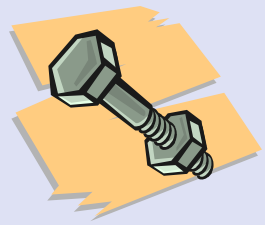
1. Markets and industries change, the site closes.
2. The community economic engine drives reuse for redevelopment.
3. Assessment identifies environmental issues that complicate the deal.
4. The site just became a Brownfield.

# Decline, abandonment, rebirth...



1. Markets and industries change, the site closes.
2. The community economic engine drives reuse for redevelopment.
3. Assessment identifies environmental issues that complicate the deal.
4. The site just became a Brownfield.
5. Economic development funds demolition as environmental cleanup is evaluated.

# The Financial Equation

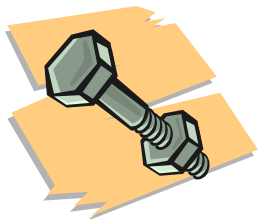


- Each Team will develop a financial strategy for their respective Project
- Assessing external factors to determine viable alternatives
  - Political realities
  - Economic opportunities of the community
  - Leadership of the project
  - Pulling in all of the pieces - government (federal, state and local), private sector, non-profit sector
- Test the strategy; determine which parts of the equation are variable, which cannot be changed.



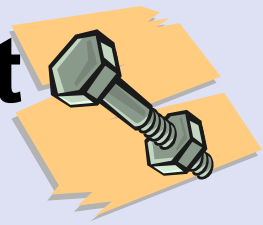
Equal...  
but not.

LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT		GREENFIELD COMMERCIAL DEVELOPMENT	
Lot Size (acres)		20.0		20.0
Lot Total Square Feet		871,200		871,200
Floor Area Ratio (FAR) or Density		0.40		0.40
Building Area (total square feet)		348,480		348,480
Number of owners prior to acquisition		1		1
<b>Land Acquisition</b>				
Due Diligence	\$ 3.00 p.s.f.	\$ 2,613,600	@ \$ 3.00 p.s.f.	\$ 2,613,600
	Est.	\$ 3,500	Est.	\$ 3,500
<b>Site Preparation</b>				
Demolition Costs		Est. \$ -		Est. \$ -
Remediation Cost Estimate (Cost Per Square Foot)		all \$ -		\$ -
Other Site Preparation	@ \$ - p.s.f.		@ \$ - p.s.f.	\$ -
Off-set Costs:	@ \$ 2.00 p.s.f.	\$ 1,742,400	@ \$ 2.00 p.s.f.	\$ 1,742,400
Brownfields 128a Assessment				
Brownfields Cleanup Grant				
Brownfields Remediation Tax Credit				
Historic Tax Preservation Credit				
<b>Hard Costs (Construction)</b>				
Building	@ \$ 38 p.s.f.	\$ 13,242,240	@ \$ 38 p.s.f.	\$ 13,242,240
<b>Soft Costs</b>				
Legal	@ 0.25%	\$ 33,106	@ 0.25%	\$ 33,106
Environmental Consultants	@ \$ 0.013 p.s.f.	\$ 11,326	@ \$ 0.013 p.s.f.	\$ 11,326
Other Soft Costs (architect, planner, etc.)	@ 15%	\$ 1,986,336	@ 15%	\$ 1,986,336
Construction Loan/Carrying Costs	@ 6%	\$ 794,534	@ 6%	\$ 794,534
<b>Total Development Cost (per building s.f.)</b>		\$ 20,427,042		\$ 20,427,042
		\$ 59		\$ 59
<b>Market Rent*</b>				
Vacancy	@ \$ 5.00 NNN	\$ 1,742,400	@ \$ 5.00 NNN	\$ 1,742,400
Security (pass through CAM) *	@ 10%	\$ (174,240)	@ 10%	\$ (174,240)
<b>Net Operation Income (NOI)</b>	@ \$ 0.25 p.s.f.	\$ (87,120)	@ \$ 0.25 p.s.f.	\$ (87,120)
		\$ 1,481,040		\$ 1,481,040
<b>Value (NOI/0.095)</b>				
Loan to Value Ratio (loan amount) *	@ 0.70	\$ 15,589,895	@ 0.70	\$ 15,589,895
Loan Amount (annual debt service)	20 years @ 7.0%	\$ 10,912,926	20 years @ 7.0%	\$ 10,912,926
Debt Service Coverage Ratio		\$ 1,015,294		\$ 1,015,294
Before-Tax Cash Flow		1.46		1.46
Equity Requirement		\$ 465,746		\$ 465,746
		\$ 9,514,115		\$ 9,514,115
<b>Return on Equity</b>		<b>4.9%</b>		<b>4.9%</b>
<b>Notes:</b>				
+ CAM = common area maintenance charge - costs included in CAM will be passed through to tenants				
p.s.f. = per square foot				
* NNN = triple net, i.e., tenant pays taxes, insurance and utilities				
Land acquisition costs for the project provided from Locomotive Railshops Project				



# Some Variables For Adjustment

*But be realistic to your community*



## Variable Numbers

- Cost of land acquisition
- Cost of remediation
- Site preparation
- Building costs
- Environmental costs
- Developer's Fee
- Loan interest rate
- Length of mortgage/loan
- Building costs

## Programs

- EPA Grant Program
- BEDI/108 loan
- EDI/108 loan
- State low-interest loans
- City low-interest loans
- EDA grant
- Tax credits

# Positive Effects of Depreciated Land Value

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60% Discount Valuation Scenario

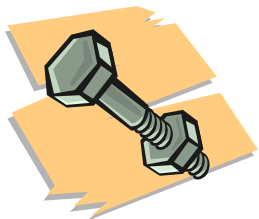
Unrealistic?

- Newburg, MO
- Atchison, KS
- Albuquerque, NM

LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT				GREENFIELD COMMERCIAL DEVELOPMENT							
Lot Size (acres)	20.0				20.0							
Lot Total Square Feet	871,200				871,200							
Floor Area Ratio (FAR) or Density	0.40				0.40							
Building Area (total square feet)	348,480				348,480							
Number of owners prior to acquisition	1				1							
<u>Land Acquisition</u>	\$	1.20	p.s.f.	\$	1,045,440	@	\$	3.00	p.s.f.	\$	2,613,600	
Due Diligence			Est.	\$	3,500				Est.	\$	3,500	
<u>Site Preparation</u>												
Demolition Costs			Est.	\$	-				Est.	\$	-	
Remediation Cost Estimate (Cost Per Square Foot)	@	\$	-	p.s.f.	\$	-	@	\$	-	p.s.f.	\$	-
Other Site Preparation	@	\$	2.00	p.s.f.	\$	1,742,400	@	\$	2.00	p.s.f.	\$	1,742,400
Off-set Costs:												
Construction / Remedy Overlap			0%	\$	-							
Brownfields 128a Assessment												
Brownfields Cleanup Grant												
Brownfields Remediation Tax Credit												
Historic Tax Preservation Credit												
<u>Hard Costs (Construction)</u>												
Building	@	\$	38	p.s.f.	\$	13,242,240	@	\$	38	p.s.f.	\$	13,242,240
<u>Soft Costs</u>												
Legal	@		0.25%	\$	33,106	@		0.25%	\$	33,106		
Environmental Consultants	@	\$	0.013	p.s.f.	\$	11,326	@	\$	0.013	p.s.f.	\$	11,326
Other Soft Costs (architect, planner, etc.)	@		10%	\$	1,324,224	@		10%	\$	1,324,224		
Construction Loan/Carrying Costs	@		6%	\$	794,534	@		6%	\$	794,534		
<b>Total Development Cost</b>				\$	18,196,770				\$	19,764,930		
<b>(per building s.f.)</b>				\$	52				\$	57		
Market Rent*	@	\$	5.00	NNN	\$	1,742,400	@	\$	5.00	NNN	\$	1,742,400
Vacancy	@		10%	\$	(174,240)	@		10%	\$	(174,240)		
Security (pass through CAM) *	@	\$	0.25	p.s.f.	\$	(87,120)	@	\$	0.25	p.s.f.	\$	(87,120)
<b>Net Operation Income (NOI)</b>				\$	1,481,040				\$	1,481,040		
Value (NOI/0.095)				\$	15,589,895				\$	15,589,895		
Loan to Value Ratio (loan amount) *	@		0.70	\$	10,912,926	@		0.70	\$	10,912,926		
Loan Amount (annual debt service)	20 years @		7.0%	\$	1,015,294	20 years @		7.0%	\$	1,015,294		
Debt Service Coverage Ratio					1.46					1.46		
Before-Tax Cash Flow				\$	465,746				\$	465,746		
Equity Requirement				\$	7,283,843				\$	8,852,003		
<b>Return on Equity</b>					<b>6.4%</b>					<b>5.3%</b>		
<b>Notes:</b>												
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p.s.f. = per square foot												
* NNN = triple net, i.e., tenant pays taxes, insurance and utilities												
Land acquisition costs for the project provided from Locomotive Railshops Project												



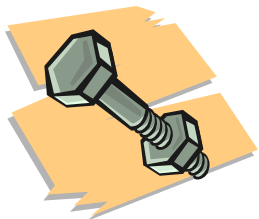




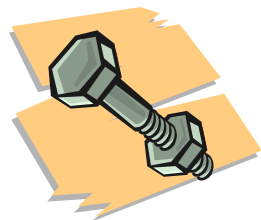
LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT		GREENFIELD COMMERCIAL DEVELOPMENT	
Lot Size (acres)		20.0		20.0
Lot Total Square Feet		871,200		871,200
Floor Area Ratio (FAR) or Density		0.40		0.40
Building Area (total square feet)		348,480		348,480
Number of owners prior to acquisition		1		1
<u>Land Acquisition</u>	\$ 2.10 p.s.f.	\$ 1,829,520	@ \$ 3.00 p.s.f.	\$ 2,613,600
Due Diligence	Est.	\$ 3,500	Est.	\$ 3,500
<u>Site Preparation</u>				
Demolition Costs	Est.	\$ -	Est.	\$ -
Remediation Cost Estimate	all	\$ -		\$ -
(Cost Per Square Foot)	@ \$ - p.s.f.		@ \$ - p.s.f.	\$ -
Other Site Preparation	@ \$ 2.00 p.s.f.	\$ 1,742,400	@ \$ 2.00 p.s.f.	\$ 1,742,400
Off-set Costs:				
Construction / Remedy Overlap	0%	\$ -		
Brownfields 128a Assessment				
Brownfields Cleanup Grant				
Brownfields Remediation Tax Credit				
Historic Tax Preservation Credit				
<u>Hard Costs (Construction)</u>				
Building	@ \$ 38 p.s.f.	\$ 13,242,240	@ \$ 38 p.s.f.	\$ 13,242,240
<u>Soft Costs</u>				
Legal	@ 0.25%	\$ 33,106	@ 0.25%	\$ 33,106
Environmental Consultants	@ \$ 0.013 p.s.f.	\$ 11,326	@ \$ 0.013 p.s.f.	\$ 11,326
Other Soft Costs (architect, planner, etc.)	@ 10%	\$ 1,324,224	@ 10%	\$ 1,324,224
Construction Loan/Carrying Costs	@ 6%	\$ 794,534	@ 6%	\$ 794,534
<b>Total Development Cost</b>		\$ 18,980,850		\$ 19,764,930
<b>(per building s.f.)</b>		\$ 54		\$ 57
Market Rent*	@ \$ 5.00 NNN	\$ 1,742,400	@ \$ 5.00 NNN	\$ 1,742,400
Vacancy	@ 10%	\$ (174,240)	@ 10%	\$ (174,240)
Security (pass through CAM) +	@ \$ 0.25 p.s.f.	\$ (87,120)	@ \$ 0.25 p.s.f.	\$ (87,120)
<b>Net Operation Income (NOI)</b>		\$ 1,481,040		\$ 1,481,040
Value (NOI/0.095)		\$ 15,589,895		\$ 15,589,895
Loan to Value Ratio (loan amount) *	@ 0.70	\$ 10,912,926	@ 0.70	\$ 10,912,926
Loan Amount (annual debt service)	20 years @ 7.0%	\$ 1,015,294	20 years @ 7.0%	\$ 1,015,294
Debt Service Coverage Ratio		1.46		1.46
Before-Tax Cash Flow		\$ 465,746		\$ 465,746
Equity Requirement		\$ 8,067,923		\$ 8,852,003
<b>Return on Equity</b>		<b>5.8%</b>		<b>5.3%</b>
<b>Notes:</b>				
+ CAM = common area maintenance charge - costs included in CAM will be passed through to tenants				
p.s.f. = per square foot				
* NNN = triple net, i.e., tenant pays taxes, insurance and utilities				
Land acquisition costs for the project provided from Locomotive Railshops Project				

# Value of Land Discount Is Eroded by Negative Effect of Added “Brown” Costs.

LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT	GREENFIELD COMMERCIAL DEVELOPMENT
Lot Size (acres)	20.0	20.0
Lot Total Square Feet	871,200	871,200
Floor Area Ratio (FAR) or Density	0.40	0.40
Building Area (total square feet)	348,480	348,480
Number of owners prior to acquisition	1	1
<u>Land Acquisition</u>	<b>\$ 2.10 p.s.f. \$ 1,829,520</b>	<b>@ \$ 3.00 p.s.f. \$ 2,613,600</b>
Due Diligence	Est. \$ 3,500	Est. \$ 3,500
<u>Site Preparation</u>		
<u>Demolition Costs</u>	Est. \$ 500,000	Est. \$ -
Remediation Cost Estimate (Cost Per Square Foot)	all \$ -	\$ -
Other Site Preparation	@ \$ 2.00 p.s.f. \$ 1,742,400	@ \$ 2.00 p.s.f. \$ 1,742,400
Off-set Costs:		
Construction / Remedy Overlap	0% \$ -	
Brownfields 128a Assessment		
Brownfields Cleanup Grant		
Brownfields Remediation Tax Credit		
Historic Tax Preservation Credit		
<u>Hard Costs (Construction)</u>		
Building	@ \$ 38 p.s.f. \$ 13,242,240	@ \$ 38 p.s.f. \$ 13,242,240
<u>Soft Costs</u>		
Legal	@ 0.35% \$ 46,348	@ 0.25% \$ 33,106
Environmental Consultants	@ \$ 0.050 p.s.f. \$ 43,560	@ \$ 0.013 p.s.f. \$ 11,326
Other Soft Costs (architect, planner, etc.)	@ 10% \$ 1,324,224	@ 10% \$ 1,324,224
Construction Loan/Carrying Costs	@ 6% \$ 794,534	@ 6% \$ 794,534
<b>Total Development Cost (per building s.f.)</b>	<b>\$ 19,526,326</b>	<b>\$ 19,764,930</b>
	\$ 56	\$ 57
Market Rent*	@ \$ 5.00 NNN \$ 1,742,400	@ \$ 5.00 NNN \$ 1,742,400
Vacancy	@ 10% \$ (174,240)	@ 10% \$ (174,240)
Security (pass through CAM) *	@ \$ 0.25 p.s.f. \$ (87,120)	@ \$ 0.25 p.s.f. \$ (87,120)
<b>Net Operation Income (NOI)</b>	<b>\$ 1,481,040</b>	<b>\$ 1,481,040</b>
Value (NOI/0.095)	\$ 15,589,895	\$ 15,589,895
Loan to Value Ratio (loan amount) *	@ 0.70 \$ 10,912,926	@ 0.70 \$ 10,912,926
Loan Amount (annual debt service)	20 years @ 7.0% \$ 1,015,294	20 years @ 7.0% \$ 1,015,294
Debt Service Coverage Ratio	1.46	1.46
Before-Tax Cash Flow	\$ 465,746	\$ 465,746
Equity Requirement	\$ 8,613,400	\$ 8,852,003
<b>Return on Equity</b>	<b>5.4%</b>	<b>5.3%</b>
<b>Notes:</b>		
+ CAM = common area maintenance charge - costs included in CAM will be passed through to tenants		
p.s.f. = per square foot		
* NNN = triple net, i.e., tenant pays taxes, insurance and utilities		
Land acquisition costs for the project provided from Locomotive Railshops Project		



# Negative Effect of Cost of Cleanup

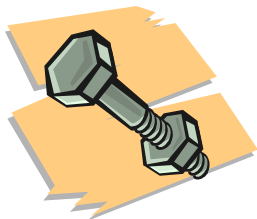


LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT		GREENFIELD COMMERCIAL DEVELOPMENT	
Lot Size (acres)		20.0		20.0
Lot Total Square Feet		871,200		871,200
Floor Area Ratio (FAR) or Density		0.40		0.40
Building Area (total square feet)		348,480		348,480
Number of owners prior to acquisition		1		1
<u>Land Acquisition</u>	\$ 2.10 p.s.f.	\$ 1,829,520	@ \$ 3.00 p.s.f.	\$ 2,613,600
Due Diligence	Est.	\$ 3,500	Est.	\$ 3,500
<u>Site Preparation</u>				
Demolition Costs	Est.	\$ 500,000	Est.	\$ -
Remediation Cost Estimate	all	\$ 900,000		\$ -
(Cost Per Square Foot)	@ \$ 1.03 p.s.f.		@ \$ - p.s.f.	\$ -
Other Site Preparation	@ \$ 2.00 p.s.f.	\$ 1,742,400	@ \$ 2.00 p.s.f.	\$ 1,742,400
Off-set Costs:				
Construction / Remedy Overlap	0%	\$ -		
Brownfields 128a Assessment				
Brownfields Cleanup Grant				
Brownfields Remediation Tax Credit				
Historic Tax Preservation Credit				
<u>Hard Costs (Construction)</u>				
Building	@ \$ 38 p.s.f.	\$ 13,242,240	@ \$ 38 p.s.f.	\$ 13,242,240
<u>Soft Costs</u>				
Legal	@ 0.55%	\$ 72,832	@ 0.25%	\$ 33,106
Environmental Consultants	@ \$ 0.050 p.s.f.	\$ 43,560	@ \$ 0.013 p.s.f.	\$ 11,326
Other Soft Costs (architect, planner, etc.)	@ 10%	\$ 1,324,224	@ 10%	\$ 1,324,224
Construction Loan/Carrying Costs	@ 6%	\$ 794,534	@ 6%	\$ 794,534
<b>Total Development Cost</b>		\$ 20,452,811		\$ 19,764,930
<b>(per building s.f.)</b>		\$ 59		\$ 57
Market Rent*	@ \$ 5.00 NNN	\$ 1,742,400	@ \$ 5.00 NNN	\$ 1,742,400
Vacancy	@ 10%	\$ (174,240)	@ 10%	\$ (174,240)
Security (pass through CAM) *	@ \$ 0.25 p.s.f.	\$ (87,120)	@ \$ 0.25 p.s.f.	\$ (87,120)
<b>Net Operation Income (NOI)</b>		\$ 1,481,040		\$ 1,481,040
Value (NOI/0.095)		\$ 15,589,895		\$ 15,589,895
Loan to Value Ratio (loan amount) *	@ 0.70	\$ 10,912,926	@ 0.70	\$ 10,912,926
Loan Amount (annual debt service)	20 years @ 7.0%	\$ 1,015,294	20 years @ 7.0%	\$ 1,015,294
Debt Service Coverage Ratio		1.46		1.46
Before-Tax Cash Flow		\$ 465,746		\$ 465,746
Equity Requirement		\$ 9,539,884		\$ 8,852,003
<b>Return on Equity</b>		<b>4.9%</b>		<b>5.3%</b>
<b>Notes:</b>				
+ CAM = common area maintenance charge - costs included in CAM will be passed through to tenants				
p.s.f. = per square foot				
* NNN = triple net, i.e., tenant pays taxes, insurance and utilities				
Land acquisition costs for the project provided from Locomotive Railshops Project				

# Positive Effect of Cleanup And Construction Overlaps

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As site clearing & stripping, demolition, trucking, excavating equipment, mobilization, signage, site security, utilities, worker sanitation, etc.



LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT		GREENFIELD COMMERCIAL DEVELOPMENT	
Lot Size (acres)	20.0		20.0	
Lot Total Square Feet	871,200		871,200	
Floor Area Ratio (FAR) or Density	0.40		0.40	
Building Area (total square feet)	348,480		348,480	
Number of owners prior to acquisition	1		1	
<u>Land Acquisition</u>	\$ 2.10 p.s.f.	\$ 1,829,520	@ \$ 3.00 p.s.f.	\$ 2,613,600
Due Diligence	Est.	\$ 3,500	Est.	\$ 3,500
<u>Site Preparation</u>				
Demolition Costs	Est.	\$ 500,000	Est.	\$ -
Remediation Cost Estimate	all	\$ 900,000		\$ -
(Cost Per Square Foot)	@ \$ 1.03 p.s.f.		@ \$ - p.s.f.	\$ -
Other Site Preparation	@ \$ 2.00 p.s.f.	\$ 1,742,400	@ \$ 2.00 p.s.f.	\$ 1,742,400
Off-set Costs:				
Construction / Remedy Overlap	20%	\$ (348,480)		
Brownfields 128a Assessment				
Brownfields Cleanup Grant				
Brownfields Remediation Tax Credit				
Historic Tax Preservation Credit				
<u>Hard Costs (Construction)</u>				
Building	@ \$ 38 p.s.f.	\$ 13,242,240	@ \$ 38 p.s.f.	\$ 13,242,240
<u>Soft Costs</u>				
Legal	@ 0.55%	\$ 72,832	@ 0.25%	\$ 33,106
Environmental Consultants	@ \$ 0.050 p.s.f.	\$ 43,560	@ \$ 0.013 p.s.f.	\$ 11,326
Other Soft Costs (architect, planner, etc.)	@ 10%	\$ 1,324,224	@ 10%	\$ 1,324,224
Construction Loan/Carrying Costs	@ 6%	\$ 794,534	@ 6%	\$ 794,534
<b>Total Development Cost</b>		\$ 20,104,331		\$ 19,764,930
<b>(per building s.f.)</b>		\$ 58		\$ 57
Market Rent*	@ \$ 5.00 NNN	\$ 1,742,400	@ \$ 5.00 NNN	\$ 1,742,400
Vacancy	@ 10%	\$ (174,240)	@ 10%	\$ (174,240)
Security (pass through CAM)*	@ \$ 0.25 p.s.f.	\$ (87,120)	@ \$ 0.25 p.s.f.	\$ (87,120)
<b>Net Operation Income (NOI)</b>		\$ 1,481,040		\$ 1,481,040
Value (NOI/0.095)		\$ 15,589,895		\$ 15,589,895
Loan to Value Ratio (loan amount) *	@ 0.70	\$ 10,912,926	@ 0.70	\$ 10,912,926
Loan Amount (annual debt service)	20 years @ 7.0%	\$ 1,015,294	20 years @ 7.0%	\$ 1,015,294
Debt Service Coverage Ratio		1.46		1.46
Before-Tax Cash Flow		\$ 465,746		\$ 465,746
Equity Requirement		\$ 9,191,404		\$ 8,852,003
<b>Return on Equity</b>		<b>5.1%</b>		<b>5.3%</b>
<b>Notes:</b>				
+ CAM = common area maintenance charge - costs included in CAM will be passed through to tenants				
p.s.f. = per square foot				
* NNN = triple net, i.e., tenant pays taxes, insurance and utilities				
Land acquisition costs for the project provided from Locomotive Railshops Project				

# Positive Effect of Special Brownfield Program Off-sets

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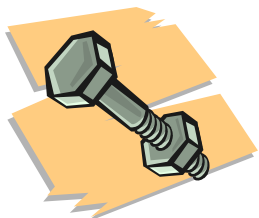
Although these often do not go directly to the developer, the net effect of removing cost from the project has been shown in the *pro forma*.

LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT				GREENFIELD COMMERCIAL DEVELOPMENT							
Lot Size (acres)	20.0				20.0							
Lot Total Square Feet	871,200				871,200							
Floor Area Ratio (FAR) or Density	0.40				0.40							
Building Area (total square feet)	348,480				348,480							
Number of owners prior to acquisition	1				1							
Land Acquisition	\$	2.10	p.s.f.	\$	1,829,520	@	\$	3.00	p.s.f.	\$	2,613,600	
Due Diligence			Est.	\$	3,500			Est.	\$	3,500		
Site Preparation												
Demolition Costs			Est.	\$	500,000			Est.	\$	-		
Remediation Cost Estimate			all	\$	900,000				\$	-		
(Cost Per Square Foot)	@	\$	1.03	p.s.f.			@	\$	-	p.s.f.		
Other Site Preparation	@	\$	2.00	p.s.f.	\$	1,742,400	@	\$	2.00	p.s.f.	\$	1,742,400
Off-set Costs:												
Construction / Remedy Overlap			0%	\$	-							
Brownfields 128a Assessment				\$	(45,000)							
Brownfields Cleanup Grant				\$	(200,000)							
Brownfields Remediation Tax Credit				\$	(900,000)							
Historic Tax Preservation Credit			20%	\$	(1,324,224)							
Hard Costs (Construction)												
Building	@	\$	38	p.s.f.	\$	13,242,240	@	\$	38	p.s.f.	\$	13,242,240
Soft Costs												
Legal	@		0.55%	\$	72,832	@		0.25%	\$	33,106		
Environmental Consultants	@	\$	0.050	p.s.f.	\$	43,560	@	\$	0.013	p.s.f.	\$	11,326
Other Soft Costs (architect, planner, etc.)	@		10%	\$	1,324,224	@		10%	\$	1,324,224		
Construction Loan/Carrying Costs	@		6%	\$	794,534	@		6%	\$	794,534		
Total Development Cost				\$	17,983,587				\$	19,764,930		
(per building s.f.)				\$	52				\$	57		
Market Rent*	@	\$	5.00	NNN	\$	1,742,400	@	\$	5.00	NNN	\$	1,742,400
Vacancy	@		10%	\$	(174,240)	@		10%	\$	(174,240)		
Security (pass through CAM) +	@	\$	0.25	p.s.f.	\$	(87,120)	@	\$	0.25	p.s.f.	\$	(87,120)
Net Operation Income (NOI)				\$	1,481,040				\$	1,481,040		
Value (NOI/0.095)				\$	15,589,895				\$	15,589,895		
Loan to Value Ratio (loan amount) *	@		0.70	\$	10,912,926	@		0.70	\$	10,912,926		
Loan Amount (annual debt service)	20 years @		7.0%	\$	1,015,294	20 years @		7.0%	\$	1,015,294		
Debt Service Coverage Ratio					1.46					1.46		
Before-Tax Cash Flow				\$	465,746				\$	465,746		
Equity Requirement				\$	7,070,660				\$	8,852,003		
Return on Equity					6.6%					5.3%		
Notes:												
+ CAM = common area maintenance charge - costs included in CAM will be passed through to tenants												
p.s.f. = per square foot												
* NNN = triple net, i.e., tenant pays taxes, insurance and utilities												
Land acquisition costs for the project provided from Locomotive Railshops Project												



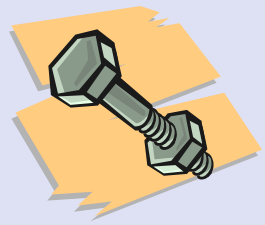
# Impact by Interest Rates

LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT				GREENFIELD COMMERCIAL DEVELOPMENT					
Lot Size (acres)	20.0				20.0					
Lot Total Square Feet	871,200				871,200					
Floor Area Ratio (FAR) or Density	0.40				0.40					
Building Area (total square feet)	348,480				348,480					
Number of owners prior to acquisition	1				1					
<u>Land Acquisition</u>										
Due Diligence	\$	2.10	p.s.f.	\$	1,829,520	@	\$	3.00 p.s.f.	\$	2,613,600
			Est.	\$	3,500			Est.	\$	3,500
<u>Site Preparation</u>										
Demolition Costs			Est.	\$	500,000			Est.	\$	-
Remediation Cost Estimate (Cost Per Square Foot)			all	\$	900,000				\$	-
Other Site Preparation	@	\$	1.03 p.s.f.	\$		@	\$	- p.s.f.	\$	-
Off-set Costs:	@	\$	2.00 p.s.f.	\$	1,742,400	@	\$	2.00 p.s.f.	\$	1,742,400
Construction / Remedy Overlap			0%	\$	-					
Brownfields 128a Assessment				\$	(45,000)					
Brownfields Cleanup Grant				\$	(200,000)					
Brownfields Remediation Tax Credit				\$	(900,000)					
Historic Tax Preservation Credit			20%	\$	(1,324,224)					
<u>Hard Costs (Construction)</u>										
Building	@	\$	38 p.s.f.	\$	13,242,240	@	\$	38 p.s.f.	\$	13,242,240
<u>Soft Costs</u>										
Legal	@		0.55%	\$	72,832	@		0.25%	\$	33,106
Environmental Consultants	@	\$	0.050 p.s.f.	\$	43,560	@	\$	0.013 p.s.f.	\$	11,326
Other Soft Costs (architect, planner, etc.)	@		10%	\$	1,324,224	@		10%	\$	1,324,224
Construction Loan/Carrying Costs	@		6%	\$	794,534	@		6%	\$	794,534
<b>Total Development Cost</b>				\$	17,983,587				\$	19,764,930
<b>(per building s.f.)</b>				\$	52				\$	57
<u>Market Rent*</u>										
Market Rent*	@	\$	5.00 NNN	\$	1,742,400	@	\$	5.00 NNN	\$	1,742,400
Vacancy	@		10%	\$	(174,240)	@		10%	\$	(174,240)
Security (pass through CAM) *	@	\$	0.25 p.s.f.	\$	(87,120)	@	\$	0.25 p.s.f.	\$	(87,120)
<b>Net Operation Income (NOI)</b>				\$	1,481,040				\$	1,481,040
<u>Value</u>										
Value (NOI/0.095)				\$	15,589,895				\$	15,589,895
Loan to Value Ratio (loan amount) *	@		0.70	\$	10,912,926	@		0.70	\$	10,912,926
<b>Loan Amount (annual debt service)</b>	20 years @		8.0%	\$	1,095,361	20 years @		7.0%	\$	1,015,294
Debt Service Coverage Ratio					1.35					1.46
Before-Tax Cash Flow				\$	385,679				\$	465,746
Equity Requirement				\$	7,070,660				\$	8,852,003
<b>Return on Equity</b>					<b>5.5%</b>					<b>5.3%</b>
<b>Notes:</b>										
+ CAM = common area maintenance charge - costs included in CAM will be passed through to tenants										
p.s.f. = per square foot										
* NNN = triple net, i.e., tenant pays taxes, insurance and utilities										
Land acquisition costs for the project provided from Locomotive Railshops Project										

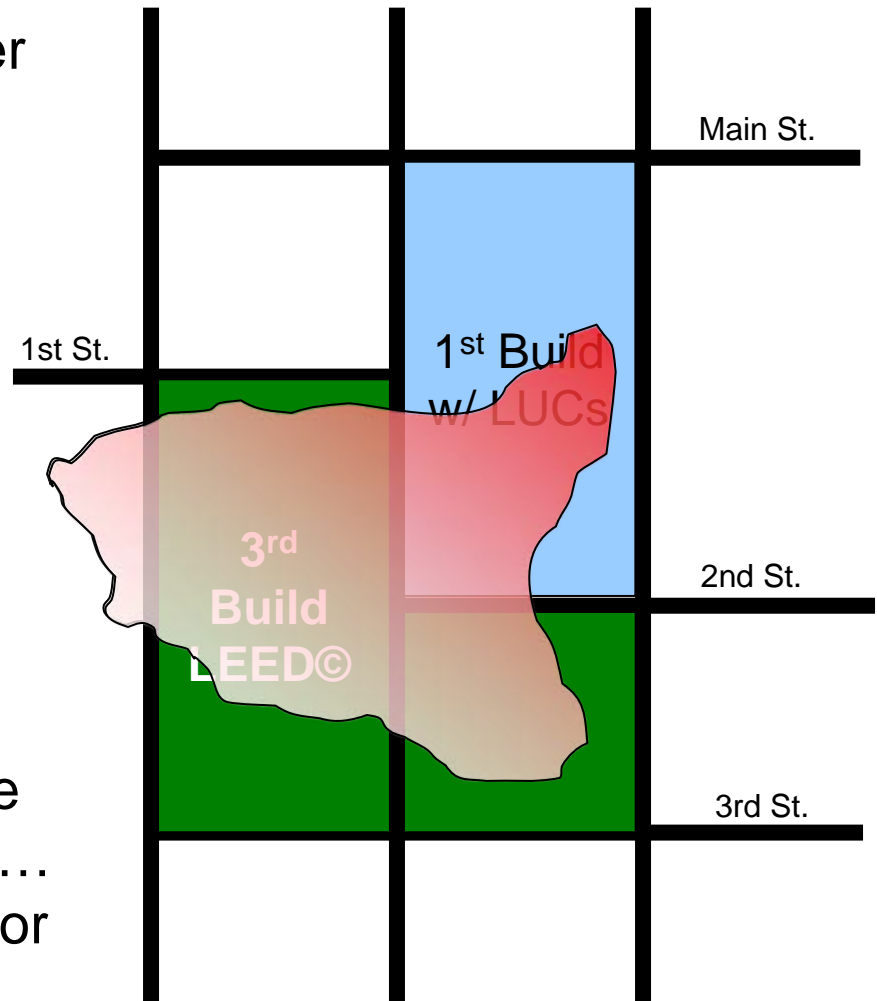




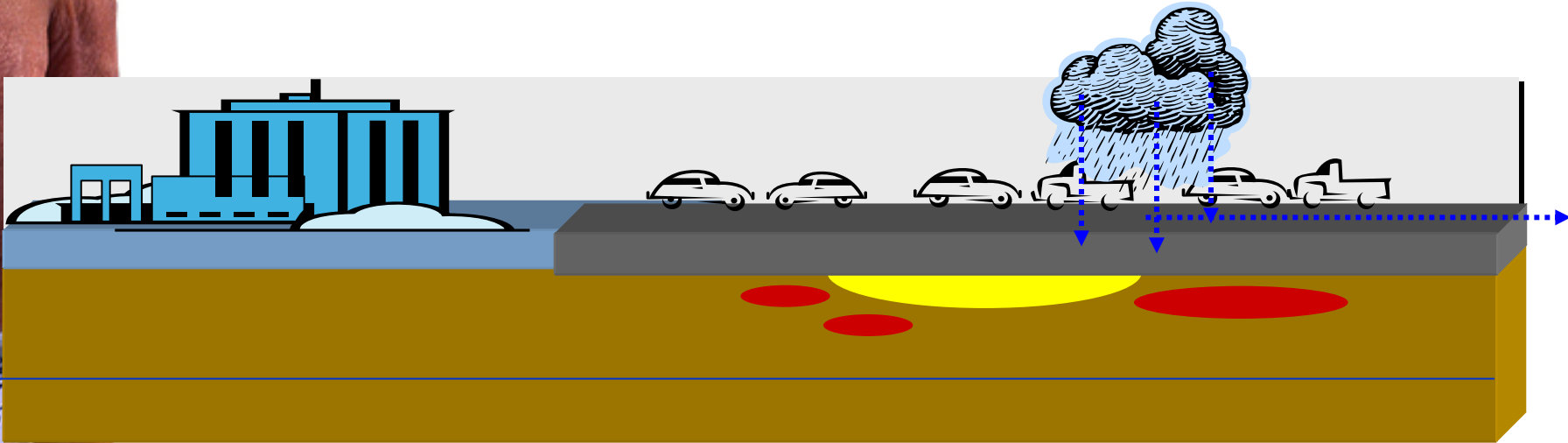
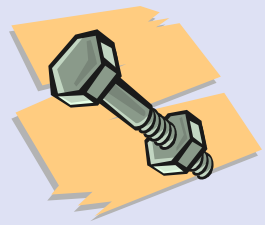
# A word on your builder position and use of institutional controls ...



- Brownfields rebuild over time
- 1<sup>st</sup> Build Position is the initial restoration
- 2nd Build Position is an expansion of the initial reconstruction
- 3rd Build Position will be fundamentally different ... in many cases, “green” or LEED building design.

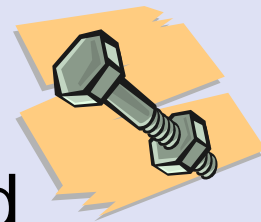


# The 1st Build Position LUCs' Highest Value to Developer



## 1st Build Position (Years 1 to 2)

- Primary redevelopment siting is optimal; you can pick where structures will have least exposure
- Typically largest discount on land prices
- The control is often designed to support the primary development concept
  - Parking lots as caps
  - Elevated construction fills in place prior to occupancy
- First market position of the redevelopment sees maximum leverage of the value of land use controls
  - First access to market for return on investment
  - Lowest LUC maintenance as part of revenue stream



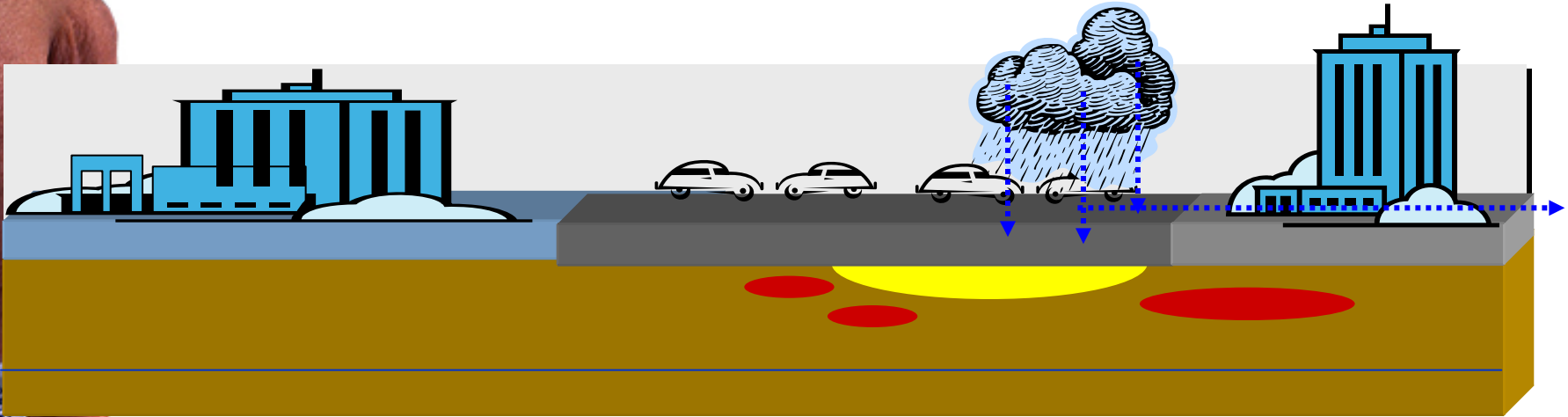
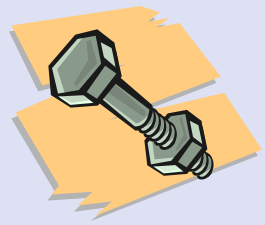
1st Build

LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT				GREENFIELD COMMERCIAL DEVELOPMENT			
Floor Area Ratio (FAR) or Density				0.40				0.40
Building Area (total square feet)				348,480				348,480
Number of owners prior to acquisition				1				1
<b>DEVELOPMENT COSTS</b>								
Land Acquisition		\$ 1.20 p.s.f.		\$ 1,045,440	@	\$ 3.00 p.s.f.		\$ 2,613,600
Due Diligence			Est.	\$ 3,500			Est.	\$ 3,500
Site Preparation								
Demolition Costs			Est.	\$ 500,000			Est.	\$ -
Remediation Cost Estimate			all	\$ -				\$ -
(Cost Per Square Foot)	@	\$ -	p.s.f.		@	\$ -	p.s.f.	\$ -
Other Site Preparation	@	\$ 2.00	p.s.f.	\$ 1,742,400	@	\$ 2.00	p.s.f.	\$ 1,742,400
Off-set Costs:								
Construction / Remedy Overlap		0%		\$ -				
Brownfields 128a Assessment								
Brownfields Cleanup Grant								
Brownfields Remediation Tax Credit								
Historic Tax Preservation Credit								
Hard Costs (Construction)								
Building	@	\$ 38	p.s.f.	\$ 13,242,240	@	\$ 38	p.s.f.	\$ 13,242,240
Soft Costs								
Legal	@	0.35%		\$ 46,348	@	0.25%		\$ 33,106
Environmental Consultants	@	\$ 0.050	p.s.f.	\$ 43,560	@	\$ 0.013	p.s.f.	\$ 11,326
Other Soft Costs (architect, planner, etc.)	@	10%		\$ 1,324,224	@	10%		\$ 1,324,224
Construction Loan/Carrying Costs	@	6%		\$ 794,534	@	6%		\$ 794,534
<b>Total Development Cost</b>				\$ 18,742,246				\$ 19,764,930
<b>(per building s.f.)</b>				\$ 54				\$ 57
<b>OPERATING COSTS (annual)</b>								
Market Rent*	@	\$ 5.00	NNN	\$ 1,742,400	@	\$ 5.00	NNN	\$ 1,742,400
Vacancy	@	10%		\$ (174,240)	@	10%		\$ (174,240)
Security (pass through CAM)*	@	\$ 0.25	p.s.f.	\$ (87,120)	@	\$ 0.25	p.s.f.	\$ (87,120)
<b>Net Operation Income (NOI)</b>				\$ 1,481,040				\$ 1,481,040
<b>FINANCING COSTS</b>								
Value (NOI/0.095)				\$ 15,589,895				\$ 15,589,895
Loan to Value Ratio (loan amount) *	@	0.70		\$ 10,912,926	@	0.70		\$ 10,912,926
Loan Amount (annual debt service)	20 years @	7.0%		\$ 1,015,294	20 years @	7.0%		\$ 1,015,294
Debt Service Coverage Ratio				1.46				1.46
Before-Tax Cash Flow				\$ 465,746				\$ 465,746
Equity Requirement				\$ 7,829,320				\$ 8,852,003
<b>60% Land Discount - Return on Equity</b>				<b>5.9%</b>				<b>5.3%</b>
				\$ (1,022,683)	<b>Added Capital Needed</b>			

Land Use Controls Used In Lieu of Remedy

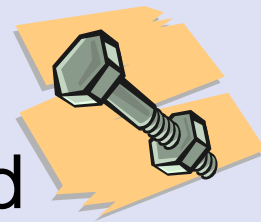
Effect on Pro forma

# The 2nd Build Position Lessening LUC Value with Time



## 2nd Build Position (Years 3 to 10)

- Second phase or peripheral build out to primary redevelopment, 1<sup>st</sup> build has appreciated land values, but with LUCs some discounts on land prices may still be available
- Some limitations on design; no basements, no water use, parking lot must remain intact, soil can be moved
- Added cost as dollars and time to build; safety, soil & water management
- Exposures for construction shift, 1st Build is occupied and specialty cleanup contractors are not now integral to site preparation
- LU/IC maintenance a larger share of revenue stream, period of first failures



2nd Build

Land Use  
Controls  
In Lieu of  
Remedy

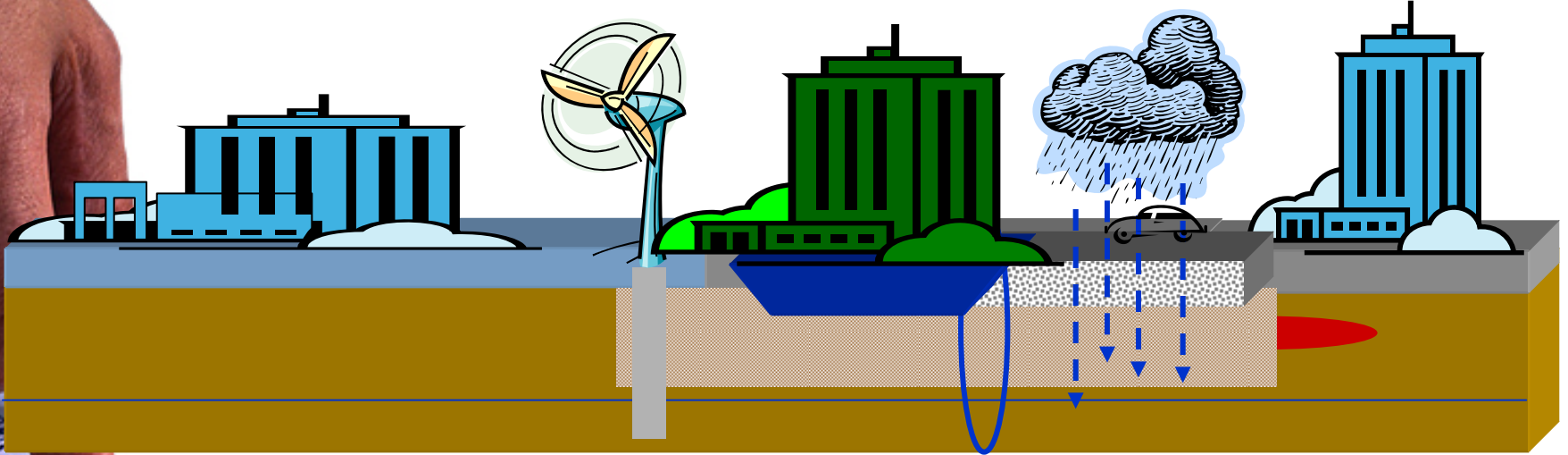
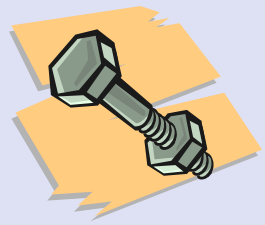
Effect on Pro forma

LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT				GREENFIELD COMMERCIAL DEVELOPMENT			
Floor Area Ratio (FAR) or Density				0.40				0.40
Building Area (total square feet)				348,480				348,480
Number of owners prior to acquisition				1				1
<b>DEVELOPMENT COSTS</b>								
<b>Land Acquisition</b>		<b>\$ 2.10 p.s.f.</b>		<b>\$ 1,829,520</b>	@	<b>\$ 3.00 p.s.f.</b>		<b>\$ 2,613,600</b>
Due Diligence			Est	\$ 3,500			Est	\$ 3,500
<b>Site Preparation</b>								
<b>Demolition Costs</b>			Est.	\$ 500,000			Est.	\$ -
Remediation Cost Estimate			all	\$ -				\$ -
(Cost Per Square Foot)	@	\$ -	p.s.f.		@	\$ -	p.s.f.	
Other Site Preparation	@	\$ 2.00	p.s.f.	\$ 1,742,400	@	\$ 2.00	p.s.f.	\$ 1,742,400
Off-set Costs:								
Construction / Remedy Overlap		0%		\$ -				
Brownfields 128a Assessment								
Brownfields Cleanup Grant								
Brownfields Remediation Tax Credit								
Historic Tax Preservation Credit								
<b>Hard Costs (Construction)</b>								
Building	@	\$ 38	p.s.f.	\$ 13,242,240	@	\$ 38	p.s.f.	\$ 13,242,240
<b>Soft Costs</b>								
<b>Legal</b>	@	0.35%		\$ 46,348	@	0.25%		\$ 33,106
<b>Environmental Consultants</b>	@	\$ 0.050	p.s.f.	\$ 43,560	@	\$ 0.013	p.s.f.	\$ 11,326
Other Soft Costs (architect, planner, etc.)	@	10%		\$ 1,324,224	@	10%		\$ 1,324,224
Construction Loan/Carrying Costs	@	6%		\$ 794,534	@	6%		\$ 794,534
<b>Total Development Cost</b>				\$ 19,526,326				\$ 19,764,930
<b>(per building s.f.)</b>				\$ 56				\$ 57
<b>OPERATING COSTS (annual)</b>								
Market Rent*	@	\$ 5.00	NNN	\$ 1,742,400	@	\$ 5.00	NNN	\$ 1,742,400
Vacancy	@	10%		\$ (174,240)	@	10%		\$ (174,240)
Security (pass through CAM)*	@	\$ 0.25	p.s.f.	\$ (87,120)	@	\$ 0.25	p.s.f.	\$ (87,120)
<b>Net Operation Income (NOI)</b>				\$ 1,481,040				\$ 1,481,040
<b>FINANCING COSTS</b>								
Value (NOI/0.095)				\$ 15,589,895				\$ 15,589,895
Loan to Value Ratio (loan amount) *	@	0.70		\$ 10,912,926	@	0.70		\$ 10,912,926
Loan Amount (annual debt service)	20 years @	7.0%		\$ 1,015,294	20 years @	7.0%		\$ 1,015,294
Debt Service Coverage Ratio				1.46				1.46
Before-Tax Cash Flow				\$ 465,746				\$ 465,746
Equity Requirement				\$ 8,613,400				\$ 8,852,003
<b>30% Land Discount - Return on Equity</b>				<b>5.4%</b>				<b>5.3%</b>
				<b>\$ (238,603)</b>				<b>Added Capital Needed</b>



# The 3rd Build Position

## Collision of Good Intentions



### 3rd Build as Green/LEED (Years 10+)

- Property discounts are gone with 1<sup>st</sup> & 2<sup>nd</sup> Build, may be back to fair market value despite LUCs
- Although using a Brownfields site is an automatic 1 point in LEED, LUCs may no longer support vital construction concepts
  - Green architecture, permeable pavements, green space
  - Water features
  - Subsurface uses to maximize land use
  - No storm water diversion
- LEED may require the cleanup that was not necessary in the earlier build and capital positions ... or technology to overcome hurdles





## 3rd Build

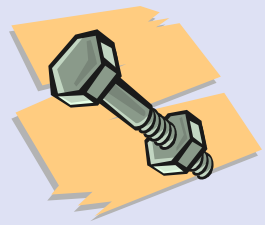
## Remedy to implement Green/ LEED Designs

## Effect on Pro forma

LOCOMOTIVE SHOPS	BROWNFIELD COMMERCIAL DEVELOPMENT				GREENFIELD COMMERCIAL DEVELOPMENT			
GENERAL INFORMATION								
Lot Size (acres)				20.0				20.0
Lot Total Square Feet				871,200				871,200
Floor Area Ratio (FAR) or Density				0.40				0.40
Building Area (total square feet)				348,480				348,480
Number of owners prior to acquisition				1				
DEVELOPMENT COSTS								
Land Acquisition		\$ 3.00	p.s.f.	\$ 2,613,600	@	\$ 3.00	p.s.f.	\$ 2,613,600
Due Diligence			Est.	\$ 3,500			Est.	\$ 3,500
Site Preparation								
Demolition Costs			Est.	\$ 500,000			Est.	\$ -
Remediation Cost Estimate			all	\$ 900,000				\$ -
(Cost Per Square Foot)	@	\$ 1.03	p.s.f.		@	\$ -	p.s.f.	\$ -
Other Site Preparation	@	\$ 2.00	p.s.f.	\$ 1,742,400	@	\$ 2.00	p.s.f.	\$ 1,742,400
Off-set Costs:								
Construction / Remedy Overlap		0%		\$ -				
Brownfields 128a Assessment								
Brownfields Cleanup Grant								
Brownfields Remediation Tax Credit								
Historic Tax Preservation Credit								
Hard Costs (Construction)								
Building	@	\$ 38	p.s.f.	\$ 13,242,240	@	\$ 38	p.s.f.	\$ 13,242,240
Soft Costs								
Legal	@	0.55%		\$ 72,832	@	0.25%		\$ 33,106
Environmental Consultants	@	\$ 0.050	p.s.f.	\$ 43,560	@	\$ 0.013	p.s.f.	\$ 11,326
Other Soft Costs (architect, planner, etc.)	@	10%		\$ 1,324,224	@	10%		\$ 1,324,224
Construction Loan/Carrying Costs	@	6%		\$ 794,534	@	6%		\$ 794,534
Total Development Cost				\$ 21,236,891				\$ 19,764,930
(per building s.f.)				\$ 61				\$ 57
OPERATING COSTS (annual)								
Market Rent*	@	\$ 5.00	NNN	\$ 1,742,400	@	\$ 5.00	NNN	\$ 1,742,400
Vacancy	@	10%		\$ (174,240)	@	10%		\$ (174,240)
Security (pass through CAM)*	@	\$ 0.25	p.s.f.	\$ (87,120)	@	\$ 0.25	p.s.f.	\$ (87,120)
Net Operation Income (NOI)				\$ 1,481,040				\$ 1,481,040
FINANCING COSTS								
Value (NOI/0.095)				\$ 15,589,895				\$ 15,589,895
Loan to Value Ratio (loan amount) *	@	0.70		\$ 10,912,926	@	0.70		\$ 10,912,926
Loan Amount (annual debt service)	20 years @	7.0%		\$ 1,015,294	20 years @	7.0%		\$ 1,015,294
Debt Service Coverage Ratio				1.46				1.46
Before-Tax Cash Flow				\$ 465,746				\$ 465,746
Equity Requirement				\$ 10,323,964				\$ 8,852,003
No Land Discount - Return on Equity				4.5%				5.3%
				\$ 1,471,961				Added Capital Needed

**\$1,472,000**

# The Results



- You will now have ~2 hours to conduct the assignment.
- We'll then come around and save the results to a flash-drive for group viewing and discussion.
- Each team will be asked to explain the steps and decisions made, clearly stating the assumptions that were made at each step, in a presentation at the end of the exercise.
- Following the assignment, each team will receive a copy of the spreadsheet as well as each team's solution to financing the brownfield development.

## **EXERCISE #5 (Agenda Item #27)**

### **Pro Forma Analysis**

#### **Exercise Directions:**

1. Divide into your teams and sit at one of the computer stations.
2. Each team will work on the project site that you visited on Tuesday. Read the description and insert the numbers provided into the excel spreadsheet on the computer. You will notice that the return on equity for the project is quite low – especially in comparison to the Greenfield development.
3. The exercise is to try to use the government programs and your negotiation skills to develop a financing package for the site. The goal is to try to equate the Greenfield return on equity to as close as possible or higher a number.
4. You will now have the rest of the afternoon to conduct the assignment. Many of the numbers in the spreadsheet can be changed including the interest rate for the loan, the amount of the remediation, the land acquisition, developer's fee, etc. Use your best judgment to develop the financing package.
5. Each team will be asked to explain the steps and decisions made, clearly stating the assumptions that were made at each step, in a presentation at the end of the exercise. In this exercise, we are looking for the teams to use the knowledge learned about financing brownfields and to think creatively about how to mix local, state and federal financing.
6. We will have a report out at the end of the day. You will also be expected to incorporate this analysis into your overall presentation on Friday.

## Brownfield Nuts & Bolts Training

### Exercise #5 Sources of Financing

[illegible]